Lesson 56 - Normal Feeding Of Infants; Feeding Babies Under Abnormal Conditions Until Weaning Age

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1. History Of Infant Feeding

Until recently, women never considered not nursing their babies. It was the only means available to them at the time—the only way they knew how to feed their babies. In fact, not only did they breast-feed their babies but they did so until the child was at least two or three years of age.

Shelton points out in an article, "The Story of Infant Nursing," that most civilizations of people nursed their babies and for long periods of time. He included the Egyptians, the American Indians, the Mesopotamians, the Greeks, the Romans, and the Orientals in his documentation of this fact. In these cultures, a wet nurse (a woman with breast milk who nurses your baby for you) was utilized only by rich women who thought they were "above" nursing their own babies.

When babies were first artificially fed, it was on bread and water. Then came the use of cow's milk. The invention of the bottle naturally followed. The first bottle consisted of a cow's horn with a couple of pieces of leather sewn to the narrow end which had a hole in it. The baby sucked the milk through the holes between the stitches of the leather. Next came the invention of artificial formula milks and all sorts of canned baby foods—and needless to say, the deterioration of health.

Nursing, and in fact nursing for long periods, continued in this country until the beginning of this century. After this, the decline in breast-feeding was very rapid in America. This is largely due to the medical profession advising mothers that bottle-feeding is better (cleaner) for the baby and will allow them more freedom. This decline was also due to the rising dairy industry followed by the manufacture of artificial formula milks which were pushed for a profit.

By the 1920s, a women's rights movement began and breasts went out of style. Women were moving into a men's world and took jobs outside of the home. They were no longer able to stay home and nurse their babies.

Besides women being forced into the work world, doctors—and other "experts" were urging mothers not to breast-feed and if they do breast-feed, they should wean early. These "experts" claimed that if mothers nursed their babies too long, their child will become too attached to them, become emotionally retarded, or that it will ruin their marital relationships, etc.

With the 20th century came so-called scientific child rearing—rearing the child on a schedule rather than on instinct or common sense. Up until a generation ago, children mostly stayed home with their mothers until kindergarten or first grade. Each year it seems the age of children being cared for by those other than parents gets lowered. Now even infants are raised in day care centers. Much of this is due to the economic situation—our exploitive industrial society—forcing women to work and away from their children.

In the 1960s and 1970s the trend, however, came back toward breast-feeding. Women began questioning the "experts" and feeling there must be a better way. Now there are many books available on the subjects of natural birthing and breast-feeding. There are also organizations such as the La Leche League willing to help and urging women to go back to nature's way of nourishing their young.

2. Importance Of Breast Feeding

> "Breast milk as the baby draws it directly from the maternal fountain without the interference of a middle man, is drawn from the living cells that produce it for the specific purpose of nourishing the baby. It is taken directly into the baby's stomach at the temperature at which it leaves the breast, without oxidation or contamination. Its ingredients and physical characteristics are especially adapted not only to the needs of the digestive organs of the human infant but also to the nutritive requirements of the infant. It is even designed to educate the digestive organs of the infant." — Dr. Herbert M. Shelton, "The Story of Infant Nursing," *Hygienic Review*
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> The only perfect food for an infant is its own mother's breast milk. Of course, under certain circumstances, it is not possible for the mother to breast-feed (this will be covered later in this lesson). However, most women can breast-feed their young and should if they want to have the healthiest baby possible.
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> "Nature has made provision for the infant to be nursed. She has equipped women with milk-producing glands and the normal woman is possessed of instincts that lead her to nurse her baby. At the same time, the baby itself is equipped with instincts that cause it to seek for the maternal breast and to extract its food from this source." — Dr. Herbert M. Shelton, "Baby's First Years," *Hygienic Review*

There are many advantages to breast-feeding your young which I will go into in the next section of this lesson. There are also some myths surrounding the advantages of breast-feeding. One of these is the idea of immunity. Most books or articles on the subject of breast-feeding state that breast milk produces an immunity in the suckling infant to certain diseases. From previous lessons touching on the subject of immunity you are probably aware that we can be made immune to nothing. If we indulge in the causes of disease, we suffer disease. The same holds true for infants. Breast-feeding builds stronger, healthier babies that—providing the mother is in good health and the infant isn't being fed any unwholesome foods in addition to breast milk and exposed to unwholesome environmental influences—will be free of disease.

Another claim by the aforementioned books and articles is that breast-feeding prevents breast cancer. Again, if the causes of cancer aren't indulged, cancer will not occur.

Perhaps the fact that most women who breast-feed their babies are much more health conscious than, those who bottle-feed is an explanation for the lower fate of breast cancer among these women.

In spite of these myths, however, there are many advantages to be had by breast-feeding your young.

2.1 Advantages of Breast-Feeding

Several years ago, a study was conducted by Dr. Randolph Paine of the University of Iowa's department of family practice. He tested 40 breast-fed babies and 66 bottle-fed babies for a period of six months from birth. He found that breast-fed babies visited a physician an average of 1.6 times due to illness. The bottle-fed babies visited 2.8 times during this period. This is nearly twice as often.

Other studies have shown that breast-fed babies have six times the chance of living through their first year as bottle-fed babies. Ninety percent of all infantile deaths occur in bottle-fed babies.

Breast-fed babies are vigorous and healthy and are less likely to develop diseases—especially, the so-called contagious diseases, breast-fed babies will be less likely to have bowel troubles and gastrointestinal impairments.

Breast milk is always ready—it requires no fixing and is always there. It does not contain dirt or contamination and doesn't need preparation or measuring. It is always fresh and cannot deteriorate.

Breast-feeding is cheaper than, bottle-feeding (it costs you nothing) and gives you more time to be with baby because you spend less time preparing, sterilizing, warming, cooking, and cleaning up after bottles.

Breast milk is formula perfect for baby's digestive system. It is readily assimilated and easy to digest, allowing baby more energy for better growth of brain and body.

A baby has an inexhaustible need to be loved. Breastfeeding shows him he is loved. It gives him a secure feeling of being snuggled closely to you when nursing. Breastfeeding provides closeness and warmth—a close contact that bonds a mother with her child.

Baby's sucking after birth helps the uterus of the mother to contract to its normal size quickly. This prevents excessive bleeding after delivery.

Babies that are breast-fed are less likely to be constipated or have skin disorders and respiratory ailments. They will not have any of the so-called "allergies" common among bottle-fed babies. They're also free of gastroenteritis, blood poisoning, and will have fewer dental problems later in life.

If a woman is breast-feeding solely, that is, not feeding her baby anything but breast milk, her ovulation will be postponed for as much as two years. This means that if she does indulge in sex while lactating, she will not get pregnant as soon. Thus, natural child spacing and no artificial means of birth control is necessary.

Another advantage of breast-feeding babies is that their stools will not smell foul. They smell sweet and are loose and yellowish in color rather than hard, dark-colored, and foul smelling as in bottle-fed babies. This is because breast milk is easily digested and it doesn't putrefy in the baby's body.

In spite of the many advantages of breast-feeding, it does not guarantee good mothering. There is much more to good mothering aside from providing the best food.

Also there is much to know about breast-feeding such as when to feed, how often to feed, under what conditions to feed, how much to feed, etc. This will be covered later in this lesson.

2.2 Bottle-feeding

Bottle-feeding became popular with the belief that it was cleaner, somehow better than breast milk. It was also considered advantageous for the woman on the go—she didn't have to be with baby all the time in order for him to be fed. Someone else could give him the bottle as well as she. It allowed her to go to

work.

However, as far as I can see, there are no advantages to bottle-feeding. Even if a woman has to work there are ways to breast-feed her baby. She can hand express her milk before work in the morning or the night before and freeze it. It will be there for the caretaker to put out at room temperature ahead of lime and be ready for baby when baby is hungry.

There are many, many disadvantages to bottle-feeding though. One is it can lead to obesity. The artificial carbohydrates in formula milks are habit forming and increase consumption of artificial sweets later in life. Artificial formulas contain much salt which can lead to dehydration in infants and toxicity. There are high levels of lead in formula milk that has been stored in tin cans.

Bottle-feeding is a very unnatural approach to handling an infant's nutritional needs. It comes complete with schedules, bottles (which can easily become contaminated), complicated preparation, a waste of precious energy, a waste of time, etc. A mother has to be concerned with which formula to use, how to prepare it, how much to use, how often to feed, whether or not to hold the baby, etc. And at best, all the manufacturers can claim is that their formula is "most like mother's milk."

Bottle-fed babies are more likely to develop disease. So-called "allergic" reactions to the milk such as eczema are common. Many nutritional ailments are caused by bottle milks as mother's milk cannot be duplicated. No one even knows all the components of breast milk, and, therefore, formula milks are likely to be deficient in one or more necessary element. One formula milk was found deficient in vitamin B-6 after it was discovered that this vitamin is contained in breast milk.

Bottle milks are difficult for baby to digest. Therefore, much energy is spent in breaking these down to a usable form and less energy is directed toward baby's growth and development.

Bottle-fed babies who are fed cow's milk often have intestinal and gastric disturbances. This is because cow's milk is not suitable for the baby's digestive system. Cow's milk contains more fat, more calcium and much less tryptophan (an amino acid) and lecithin than mother's milk. Tryptophan and lecithin are used in building brains and nerves. Calcium is employed in building bones. This is why cow's milk has the components it has—a cow's bone structure grows rapidly, and its brains and nervous system are not highly or delicately organized. On the other hand, a baby is relatively small of bone and have a large, highly-organized brain with a perfection of senses and bodily control. Babies fed on cow's milk primarily have softer brains and are less likely to be as intelligent as breast-led babies. The excess of fat and cream in cow's milk also produces digestive disturbances in baby.

Cow's milk contributes to hardening of the arteries and high blood pressure later in life. It also can cause low-blood calcium in the newborn, an overload in the infant's kidneys from having to expel the excess proteins, diarrhea, respiratory infections, etc. Tonsillar and adenoid troubles are also common with babies fed cow's milk.

However, under certain, abnormal conditions, it becomes necessary for a mother to include cow's or other animals' milk in the diet of her baby. These will be included later.

Another problem with bottle milk is that it does not change with the hormonal and nutritional needs of the growing baby. The makers of baby formulas cannot duplicate the changes in composition or volume that takes place continuously in mother's milk as her baby grows.

Yes, mother's milk cannot be imitated in the laboratory. Nature had it perfect to begin with, and there is no perfect or near perfect substitute.

2.3 Common Worries and Apprehensions About Breast-feeding

Some women feel that because their breasts are small they will be unable to nurse their babies. They feel that somehow larger breasts are able to produce more milk. This is, most definitely, not true.

Other women feel that nursing will spoil the shape of their breasts. This is also not so if the woman is

taking good care of herself—eating right and exercising. Even if this were so—which is more important, the shape of your breasts or your baby's health?

A belief that an inability to nurse exists because your mother or grandmother were unable to is also unfounded. No diseases or disfunctions are hereditary. Your equipment is entirely independent of your mother's.

A fear that your milk won't be rich enough is also unfounded. Studies conducted have shown that even the milk of unhealthy, emaciated mothers is better than artificial formulas.

What if I can't produce enough milk? If this happens, just nurse your baby more. The more often a baby nurses, the more milk is produced. Also, eat plenty of juicy fruits to produce good milk.

There's no way your baby can be "allergic" or sensitive to your milk. If you've eaten spicy foods, processed foods, etc., it will go through the milk and the baby will most certainly react negatively. This is why it is important for mother to eat right and avoid toxic substances. (See Don'ts While Breast-feeding.)

You may wonder if your baby is getting enough milk. If your baby is growing, energetic, sleeping well, and displaying other signs of health, don't worry. Nurse about ten minutes on each breast during each feeding if the baby wants to nurse that long and baby should be receiving enough milk. Also, overfeeding is much more of a problem than underfeeding.

If you have older children that have been breast-fed and especially if they still remember it, you have to be very careful in your handling of the situation. Older children need to be told ahead of time (before birth) that they are going to have a new sibling and that he or she will breastfeed just as they did. Older children tend to be jealous when they see you snuggling a baby to your breast. Show them as much love as you can to allay this.

Some special problems exist for the woman who has had a premature baby or a caesarean section. A premature baby may be in an incubator for as much as several months being fed on special hospital formulas. If you wish to breast-feed when you get your baby back, you still can. You need to hand express your milk while the baby is in an incubator to ensure your milk supply will keep flowing. When you do receive your baby, he will need even more closeness and nourishment than a term baby.

He may nurse very feebly at first and require much coaxing and patience on your part to get him nursing.

A woman who has a caesarean section has received an anesthetic and is not in as good shape as if she had delivered vaginally. She should wait until all the anesthetic is out of her system to breast-feed as this will get into the milk supply. It will take more patience and persistence to get the milk out as the natural cues of a vaginal birth are not present. She will have plenty of good rich milk, however, if she eats right and relaxes.

Another apprehension of mothers is that they should stop breast-feeding if their babies get sick. The chances of breast-fed babies getting sick are not that great, however, to cause worry. If they do get sick, they will probably not have the appetite they had when well. Just hand express the milk meanwhile to keep the supply flowing.

If you get sick, you can still nurse your baby. Your baby is already used to you and your biological makeup. He or she will not get sick by nursing from you.

If you feel you are too nervous to nurse, take some courses in relaxation or meditation techniques prior to birth. This will help you to relax when nursing for it is true that if you are tense, your milk supply can be held back.

If you have inverted nipples, you have a special problem—not one that is impossible though. I have seen mothers with this problem breast-feed normally. Pull the nipples out regularly before the birth to get them used to this. They need to be out in order for baby to latch on. Also leaving them exposed to air

and sunlight fifteen to thirty minutes several times a day helps to bring them out.

Many women may feel sensitive to cultural attitudes toward breast-feeding—families discouraging you to breastfeed as they feel it's "too animal" or sensual. Some may find it disturbing and feel it's an interference in the marital relationship. In this case, try to explain to your husband beforehand why it is important to breast-feed the baby and perhaps coax him into reading books on the subject. It is important not to have people around you who are opposed to your breast-feeding while you are doing so. The baby may pick up on these feelings. Try not to let other peoples' attitudes make you tense while nursing or dissuade you from doing so. Be strong!

3. The Mechanics Of Breastfeeding

Breast-feeding an infant is a supply and demand function. The more (and longer) a baby nurses, the more milk is produced. This causes the milk supply to keep up with the growing and developmental needs of an infant.

As explained in the definition of let-down reflex, there is front milk and hind milk. The front milk gets sucked out by the baby which causes a hormone to be released into the mother's body and lets the hind milk down. The hind milk is richer than the front milk and there is more of it. Sometimes when the hind milk lets down it drips out and may spray outward from mothers' breasts. Oftentimes the mere sound of the baby crying, the sight of him, or the thought of him, can cause this let-down reflex.

Sometimes the milk gushes out too fast for the baby to swallow and he may choke a little on it. He usually turns, his head to one side to catch a breath of air. He then gets squirted in the face. Keep a spare diaper or other cloth handy to absorb this extra milk. You may need to burp the baby after swallowing too much milk to prevent upsetting his stomach.

Nursing for just a few minutes on each breast will fail to let down the hind milk in most cases. The baby needs this richer, higher-quality milk in order to ensure his nutritional requirements. Make sure you nurse for at least five to ten minutes on each breast to obtain hind milk.

After a few weeks a new mother will get used to the feeling of the let-down reflex. She will recognize the tingling sensation in her breasts and the full feeling.

More milk will let down when a woman relaxes. If she is tense and upset, only the front milk will come out and baby will be dissatisfied. It is best to wait until calm to nurse.

Colostrum has long been thought of as useless—as a waste product—and yet it comes into a woman's breasts before birth and remains there for a few days following birth. Surely nature made no mistake in putting it there. Colostrum contains half the carbohydrates and fats of regular milk and a newborn has difficulty digesting these. Colostrum is specially adapted to meet the immediate needs of the newborn.

Many women have trouble with their breasts engorging with this fluid (colostrum) after birth. Her breasts may become swollen and sore. To alleviate this get the baby to nurse to express the colostrum. Once the nursing cycle is established this problem will disappear.

Another thing to consider with breast-feeding, especially if for the first time, is prenatal nipple care. Prior to birth "toughen up" the nipples so they won't get tender or sore from baby's sucking. Do not use soap on them as this causes them to dry and crack. To open milk ducts hand express colostrum by cupping breast in hand with one finger above nipple and the other below and then squeeze. Also

exposing the breasts to air and sunlight will toughen them.

3.1 Mother's Diet

> "It is not possible to produce quantitatively and qualitatively adequate milk on a diet of white bread, embalmed meat, pasteurized milk, pies, cakes, mashed potatoes, etc. Eating large quantities of these rich foods is useless. These only impair digestion and destroy the mother's appetite. The one class of foods that greatly increases milk production in animals, and there are reasons for believing they will do so in women, are green foods. An abundance of these should be eaten." — Dr. Herbert M. Shelton, *Hygienic Care of Children*

A mother who eats of fruits and vegetables in their raw natural state will have no trouble producing adequate quantities of rich, healthy milk for her infant. The dairy products, herbal teas, excess drinking of water, etc., that are frequently recommended to increase production of milk in women are not only unnecessary but can be harmful.

Drinking excesses of cow's milk on the part of the mother rather than providing much calcium actually drains the calcium resources of the body. Excesses of fluid consumption cause extra strain on the kidneys to excrete them. Also herbs are irritants and not recommended.

Green vegetables have a high-calcium content and therefore should be consumed abundantly. Fruits are a rich source of a multitude of vitamins and minerals to produce the finest milk in mother.

A diet high in protein can result in excess protein in the milk and could be detrimental to the baby. Nervousness or lack of exercise can also result in too much protein in milk.

The same advice as in the last lesson on prenatal care also holds true while breast-feeding. Eat only when hungry, never overeat (to fullness or beyond), eat only when relaxed and in a positive state of mind, properly combine foods so they will digest most efficiently, exercise regularly, get plenty of rest and sleep, breathe fresh air, and get lots of sunshine.

The difference that diet makes to the breast milk is incredible. Breast milk does not remain the same no matter what you eat. It changes quite rapidly according to what you eat or otherwise ingest.

Remember, breast-feeding is easy if you eat well, live an easy, relaxed life without stress, and your family and friends have a good, supportive attitude toward breastfeeding.

3.2 Don'ts While Breast-Feeding

1. Do not keep long work hours, get too little sleep, get in frequent arguments, or surround yourself by critical family and friends. This affects the quality and quantity of breast milk.
2. Eating lots of contrived sweets (things sweetened with sugar, corn syrup, honey, etc.) and soft drinks. will reduce baby's appetite and cause diarrhea.
3. Hot and spicy foods result in diaper rash and indigestion in the baby.
4. Drugs, alcohol, and medicines pass through into breast milk and are harmful to baby—and you.
5. Brussel sprouts and cabbage have been known to create indigestion in babies when consumed by mother.
6. Smoking affects the taste and quality of the breast milk.
7. Eating chocolate severely cuts down on calcium level in breast milk.
8. A too-tight bra (or any bra for that matter) can cause a plugged milk duct. Symptoms of this are redness near nipple, and a core lump in breast caused by inadequate emptying of milk ducts. If this happens, let baby nurse a lot on that breast to express milk Also soak the dried secretions on outside of nipple with warm water. Keep breast empty and rest as much as possible.
9. Do not fast while lactating. A fast quickly reduces the quantity of milk and impairs its quality The milk becomes poorer in water, protein, sugar, and mineral salts. The fat content, however,

remain the same.

10. Grief, worry, anger, fear, excitement, etc., greatly diminish the secretion of milk or alter the composition of it.
11. It has been shown that sexual intercourse while lactating often induces premature menstruation, ruins the quality of milk, and induces termination of the nursing period. During orgasm, the quantity of phosphorus is reduced and this could retard brain development in the baby. Loss of lecithin is also caused by sexual indulgence. Lecithin produces brain growth. After sexual intercourse putrefying seminal fluids may be absorbed through the vaginal wall into the lymphatic system of the mother thus ruining the milk.

4. Methods Of Breast-Feeding

While nursing the baby it is best to sit up—not slouched—in a comfortable chair or cross-legged on the floor. Aim the breast downward as milk flows best downhill. To eliminate slouching bring the baby up to the breast rather than the breast down to baby.

Put the breast into the baby's mouth with as much of the areola in the baby's mouth as possible. This helps the baby latch on better and get the milk out more easily and at the same time you won't get sore nipples. Merely putting the nipple in the baby's mouth will cause him to chew on the nipple with his gums in an effort to get milk out. Aim the nipple upward in baby's mouth holding breast, up with hand with thumb on top. When baby is first born, it is more difficult for him to hold onto the breast and he needs your help.

Be sure to press the breast down just a little bit away from the baby's nose so that he can breathe. The fullness of your breasts could smother him.

If baby still acts hungry after you've emptied both breasts (usually about ten minutes on each side), he may merely want your company. A good baby carrier can help so you can resume your other duties. This provides the motion and closeness that the baby was used to in the womb.

Don't try to pull baby off of breast when still sucking. This will be painful. Release the suction by gently pressing in your breast on both sides of baby's mouth.

When baby falls asleep in your arms while you nurse him, don't just ly him down by himself. Ly down with him for awhile with your nipple still in his mouth. Then remove nipple and continue lying down with him. Then get up very slowly so as not to disturb him. The baby suddenly misses the presence and warmth of mother if not done gently and slowly and may awaken.

Babies like to be snuggled firmly and closely to mother while breast-feeding. This makes them feel secure and loved.

A baby's natural reflex is to suckle the nipple if its mouth is brought close to it. Bring baby's legs close to you angling baby so he can breathe. If baby still has trouble getting the nipple, hand express some milk first and let him taste it to create an impulse in him to begin nursing.

When baby cries, it doesn't always mean that he is hungry. Sometimes merely turning him from one side to another will stop him from crying. Other times he may want cuddling or motion. Don't always assume he is hungry and immediately push the breast in his mouth. This could create a problem later in life where he seeks food for security.

4.1 How Often to Breast-Feed—Overfeeding, Normal Feeding

Babies need only be breast-fed three times a day for the first day or two following birth. A normal, healthy baby may only awaken that number of times during a twenty-four-hour period. A baby should never be disturbed from his sleep to nurse.

By about the fifth day after birth to the second week baby should feed at about four-hour intervals during the day. A good schedule is at six a.m., 10 a.m., 2 p.m., and 6 p.m. Never feed baby at night. Nighttime is a time for sleep, not for the burden of digestion and elimination. It may be difficult at first to not nurse at night as baby might awaken, but once you get a routine established baby will follow it.

Shelton recommends merely turning your baby from one side to the other if he cries. If this does not work, perhaps walking baby will help.

Most mothers, especially new mothers, have a tendency to overfeed. They seem to think that whenever baby cries, he is hungry. In fact, some women dislike their baby's crying so much that they get into the habit of pushing the breast into baby's mouth every time he cries. This can be detrimental to baby. Overfeeding, such as this, inhibits function and retards growth and development.

Shelton recommends that following the second week after birth baby be cut back to three feedings a day. Of course, with this amount of feedings your baby will not be the fat little butterball that is considered so healthy in this society. But he will be much healthier and will develop and mature more quickly. He will develop good eating habits later in life as a result. In fact, most bad eating habits begin during infancy.

How long should baby nurse during each feeding? That depends entirely upon the flow of milk from the breast. Sometimes the baby will be thoroughly satisfied after only five minutes on each breast—sometimes it may take ten to fifteen minutes. Watch baby to see if he seems satisfied.

Besides creating fat, slowly-developed babies with bad eating habits, overfeeding causes baby to suffer from indigestion, gas, intestinal colic, diarrhea or constipation, stuffy noses, skin rashes. Overfeeding causes a frequency of urination and bowel action so that the mother is constantly changing diapers. Even at night when baby (and mother) should be sleeping, he is busy emptying his bladder and bowels.

Another common problem among infants is hiccoughs. Hiccoughs are the evidence of undigested residue. Their purpose is to eject the overload.

Most babies have regular hiccoughs and mother usually just stuffs more in—either water or sugar or both. Hiccoughs are also a result of overfeeding.

Other common complaints are drooling and spitting up so that baby can be seen wearing a bib as regularly as he would a diaper. Teething can be a painful ordeal if baby is overfed. A baby who is fed only what he needs and when he needs it does not have this problem.

Most doctors will say that baby should gain about a half a pound of weight per week for the first several months. This is an incredible amount and it is only fat that will eventually have to be lost as fat is merely toxins.

Most midwives or alternative doctors will recommend nursing your baby upon demand. But this also is not good advice as baby does not always know what amount is best for him. He needs to be trained in good eating habits— they don't necessarily come naturally. Shelton says, "In all nature there is not another, example among mammalian species where the female permits her young to feed upon demand., All of them exercise control over the nursing of their offspring...."

Oftentimes the cries of pain a baby, lets out because of intestinal distress from overfeeding are mistaken for cries of hunger and baby is fed more. The breast becomes like a pacifier and baby equates it with security. Most of these overfed babies will sleep off these feedings like a drunk sleeps off his binge. Their lives become a round of eating, vomiting, sleeping. Most people consider this a normal infant's life though.

After all the abuse an infant receives in infancy by overfeeding, his digestive organs may never function normally. He may have dyspepsia later in life and will be more susceptible to disease.

The three-feedings-a-day plan, although it may seem cruel to some of you, is definitely adequate. Many Hygienists have proven this with their own children. Their children grow faster and develop better.

They sleep better at night and give their parents less anxiety and require less attention as they're rarely complaining or sick.

The newborn possesses the power and ability to digest and assimilate, easily and continuously, only the amount of food necessary to produce normal growth. And you'll know that when you see it.

4.2 How Long To Breast-Feed

The normal nursing period of mammals, and that includes humans, is directly related to the time it takes for their young to develop. Mammals that grow rapidly and mature early have short nursing periods. Likewise, mammals that grow slowly, such as humans, have long nursing periods.

Shelton has divided the periods of feeding in a person's life into three parts. The first one is the infant period. During this period, the only food necessary to sustain normal life is breast milk. This period lasts until the infant has a mouth full of teeth—not just one or two teeth.

The next period is the transition period (discussed in next section on feeding) where baby is fed both breast milk and solid foods. This period begins when baby has the anatomical and physiological equipment (full mouth of teeth and adequate digestive juices) to digest solid foods and it ends with weaning from the breast.

The third and final period is the adult feeding period. This begins with weaning and continues until the end of life.

Most books and articles on the subjects of how long to breast-feed recommend feeding solids by the time a baby is three to six months old. They say as soon as baby begins getting teeth he is ready to handle solid food. This is obviously not so—how can anyone chew with only one or two teeth? So mother mashes, chews, and blends baby's food so that he may swallow it. But why? Breast milk is already in a form that baby can handle. When baby is ready for solids, he will have the tools to handle them.

Many doctors or books will advise mothers not to rely solely on nursing for her baby's nourishment once the baby reaches nine months to a year of age. They say mother's milk is no longer nutritionally sufficient to baby's needs and they need to supplement it. But why would nature do such a thing?—make baby's food insufficient before he is ready to deal with other foods. If mother is healthy, her milk is healthy.

The human infant is helpless much longer than any other animal. Therefore, there should be a longer nursing period. By about the age of three most children are ready to wean but some may wean earlier and others later.

By about the age of two a child has most of his teeth and has digestive enzymes to break down foods properly. By now mother's milk has insufficient amounts of iron and other nutrients as milk has already done its duty. This is a good time to include fruits and nonstarchy vegetables into the child's diet. However, this does not mean abruptly ending breast-feeding. Combine the two for as long as seems right for both you and your infant.

I realize that nursing babies for long periods such as three years, as a rule, is not an acceptable act in this culture. Many people will frown upon you and make snide remarks about it being sexual as the child is so old. Don't let this disapproval cause you to prematurely wean your child. Avoid situations and people that make you feel uncomfortable about nursing your toddler. Just remember you're raising your child as nature intended—in the best way possible.

5. Feeding Solid Foods

Now that your child has most of his teeth, he is ready to start eating the same foods you eat. That is, if you are eating a diet of fresh fruits and vegetables in their raw state.

The best first food for children is fruits. Sweet juicy oranges, dates, figs, raisins, persimmons, well-ripened bananas, etc., are excellent first foods. Show your child how to eat them. Teach them to chew their foods properly and give them only when the child is truly hungry.

Feed them fresh fruits in the summer and dried fruits in the winter. Avoid nuts as these cannot be fully chewed by a small child and they have more protein than a small child needs or can handle. Never give them starches, contrived sugars, or pasteurized milks or other dairy products. Keep their foods simple. Don't combine too many foods at one meal and don't add things such as honey or spices to '"jazz up" their food. Their taste has not yet been perverted and foods, especially fruits, will be delicious to children in their natural state.

Starchy foods such as potatoes, yams, rice, cereals, etc.. cannot be digested by the young child. They lack the salivary enzyme ptyalin, to break clown starches und they cause them much difficulty when eaten. Also, it is difficult for a small child to chew starchy foods properly and totally ensalivate them before swallowing.

Some children will indicate a desire to take foods by the time they're a year old. I have seen infants grab for foods right out of their parents' mouths. My son "scarfed down" watermelon by the time he was only six months old. He did not seem to have any problems handling it as it didn't require much chewing. Swishing it between his gums made it liquidy enough to swallow. Freshly-squeezed fruit juices such as orange or grape juice are good for babies this young also. They may be substituted for one of baby's regular breast milk feedings.

Most children are not particularly fond of vegetables. It is different with each child. Of course, starchy vegetables such as carrots should be held off for the first few years. Some children love greens and sprouts and others will only eat the nonsweet fruits such as bell peppers, tomatoes, or cucumbers that most people consider vegetables. Experiment and see which vegetables your child will eat.

In order for your child to best assimilate the foods he eats, make sure he gets plenty of exercise, fresh air, and sunshine. Keep the home environment free of stress, arguments, and other negativities as this also affects the digestive processes. Give him lots of love.

6. Feeding Under Abnormal Conditions

Naturally, it is always best to feed the baby with mother's own breast milk but if mother is unhealthy or for some reason no milk is being secreted from her breasts, it is necessary to feed the baby in other ways. Most Hygienists would recommend serving infants under these conditions goat's or cow's milk in its raw, unpasteurized state. Doctors and others will tell you not to feed baby raw milk as it contains bacteria that could cause baby to contract an infection or other health problem. This is not so. Pasteurizing, homogenizing, preserving, and then enriching milk is what creates the problems of intestinal and gastric disturbance when milk is consumed.

As mentioned under the bottle-feeding section of this lesson, animals milks are an imperfect substitute for mother's milk. However, they are better than no milk. In Shelton's article, "Baby's First Years," he states, "I have seen babies who could not handle cow's milk very well who did fine on goat's milk. I have seen other babies who could not handle goat's milk well thrive on cow's milk. And I have seen other babies that did not handle either cow's or goat's milk well who did well on soybean milk. As a rule, babies do not grow as well on soybean milk or other artificial milk as they do upon animal milks "Dr. Shelton recommends feeding them a spoonful of milk at a time and observe how they react. If favorably, gradually add more. If not, try another milk in the same fashion. Remember also never to combine milks with other foods. When milk is mixed with foods, it causes dyspepsia and constipation.

Give the baby orange juice and grape juice at separate feedings in addition to the milk. Make sure they are freshly squeezed to ensure that baby is getting all of their nutrients.

Try making nut milks by blanching almonds, adding distilled water to them (one part almonds to four parts distilled water), and then blending them until no chunks of nut remain. Strain through a clean cheesecloth to remove particles and give to baby on a spoon. Watch his reactions.

Since cow's or goal's milk are specifically designed for the needs of these animals, they are naturally deficient in nutrients necessary to the growth of a human infant. This is why it is imperative that fruit and vegetable juices are included in baby's diet. These provide the minerals, vitamins, and fruit sugars that are lacking in animal milks.

7. Questions & Answers

How can a new mother tell if colostrum has come into her breasts yet?

> There really is no need to tell except for your own security in knowing it's there. Your baby is getting it if he is sucking. But if you must be reassured that your breasts are secreting colostrum roll your nipple around with your fingers and pinch it gently. The yellowish fluid should come out.

I have known many women who's hair has fallen out when nursing their babies. What causes this?

> I cannot give you a specific cause but as with all ailments and diseases a lack of health due to lifestyle and diet are causative. I would recommend cutting down on cooked, processed, refined, salted, or sugared foods and including more fresh, ripe, raw fruits and vegetables in the diet without sauces and dressings. Get plenty of exercise, fresh air, and sunshine to make sure you're assimilating the foods. Make sure you eat a variety of fruits and vegetables to get a plethora of vitamins and minerals.

I've noticed since the baby's born that my sex drive has diminished greatly. Is this normal?

> Yes, it is normal and natural. Nature worked out a plan so that everything would be perfect. Not only are you getting all of your touching needs fulfilled by your relationship with your baby, but your baby will be healthier without your vital fluids being drained from you. As for your husband's needs—well that's something you will have to work out together. Compassion and understanding are necessary in this case.

I know it's best for my baby to be breastfed, but I'm feeling very inhibited and concerned that the baby's sucking at my breasts will sexually stimulate me. Do other women experience these feelings and if so what do they do about them?

> Many women have inhibitions such as these and it is mostly because our society sells breasts as play things for men rather than what they truly are—for feeding of infants. When the baby is born, your natural instinct to nurse will come and your breasts will no longer feel like sexual objects. Your baby's needs will transcend sexual needs or desires.

What if I am six months pregnant and my first child who is two-and-a-half years old is still nursing? Will my unborn child be deprived of nutrients?

> If you are making sure that your diet is well-balanced—that is, it contains a wide variety of raw fruits and vegetables, with nuts included, then chances are it will do no physical harm to the baby. You also need much more rest than normal and light exercise, fresh air, and sunshine. However, the older child may become very jealous when the new baby comes if you suddenly wean him. You need to cut down gradually on your child's intake of breast milk and substitute other foods and juices so that by the time the baby comes he will be adjusted to not receiving as much milk as often. You also need to explain to him in as simple terms as possible that a new baby is coming and will be nursing often. You can nurse them both for awhile as long as the older child is not nursing very often—perhaps once a day or so.

Article #1: Simplicity of Infant Feeding by William L. Esser

Infants are submitted to a shocking array of foodstuffs and formulary in an effort to find just the right thing to make them fatter and supposedly healthier. Apprehensive parents and physicians are wont to rush from one "formula" to another, from one baby food to another, from one "lacto" something or other to another, in the desperate hope that they will find the magic panacea that will quiet the wailing babe and make it grow with rosy cheek and gurgling happiness.

The amount of money spent on expensive patented and prepared "baby foods" is vast. Nothing is too good for baby (or is nothing too "bad" for baby?) What a roundabout and torturous way to have a healthy baby. The farmer's wife will travel long miles to the big city to see her child specialist and to buy her baby's' formula in the drug and grocery stores while she has all the essentials within and around her for a healthy child.

We have frequently mentioned the importance of the pregnant woman's eating and living correctly to ensure normal birth and the ability to have rich, nourishing milk for her infant. We have also stressed the wisdom of having the baby at home at the hands of a midwife or an intelligent understanding doctor versed in the Hygienic method of delivery who avoids the use of drugs anesthetics, etc., not conducive to the health of mother and child and deleterious to the function of lactation.

It is pitiful to see well-built comparatively fit mothers unable to nurse their children, feeding them unwholesome, devitalized, demineralized substances deceitfully called foods. The female of each species of animal is best suited by nature to supply its young with the most perfect food for its normal and vigorous growth. No other animal can supply an equally good substitute. The young of the human

animal have not as yet evolved to such a doubtfully happy position that they can thrive as well on substitutes whether they be of cows, goats, donkeys, or some unappetizing vegetable strewed to death in the snow white kitchen of a pickle factory or a chemist's scientific laboratory.

Dr. H. M. Shelton, in *The Hygienic Care of Children* quotes an eminent woman specialist as saving: "The finest and most important duty of motherhood is the breastfeeding of her baby. Next to the right of every child to be well born comes the right to his best food, his own mother's breast milk. Mother's milk is the perfect infant food; it cannot be imitated; and anyone who advises a mother differently is guilty of a serious crime against a helpless baby. When a baby is denied his mother's milk and put upon a bottle, he loses half his chance to be kept alive and nine-tenths of his chances to grow up into a normal healthy man or woman."

A mother who deprives her baby of this most vital link to a joyously vibrant life is to be pitied and shamed for her selfishness or ignorance. Nursing should be carried on for two years or more, not three weeks. Three weeks is the extent to which most hospital mothers can nurse their children. Then the milk dwindles away. They should fear hospitalization if they wish to nurse their baby and avoid disease, plus the pains of sleepless nights and worry.

Mothers should nurse their babies, but should prepare for it throughout pregnancy. An adequate diet of fruits, nuts, and vegetables properly balanced and combined will supply the needs of her own body as well as for the making of good nutritious milk.

If a nursing baby does not have a slow, gradual increase in growth and general aptitude, it is an indication that the mother's and child's health is being undermined because of an inadequate diet. The proper nourishment must immediately be introduced to the mother, otherwise the baby will have to be removed from the breast.

There are "students" of various health movements and reforms, who, having brushed against the skirts of Hygienic philosophy, seem to be of the impression that they have thereby become lay authorities on health and its laws. Frequently children and friends are made to suffer from nutritional deficiencies because of their half information. Mother's milk is the finest, the most perfect food for children—if—mother is in good health. If she is in very poor health, baby should be removed from the breast.

The baby may and should have supplemental feedings of undiluted orange or grapefruit juice within several weeks after its birth. Given two ounces at first the amount should gradually be increased over the following months until it may be given from six to eight ounces by the time it is eight months old. Oranges selected should be ripe and sweet. Sugar or other things should never be added to any fruit juices.

No more should be given regardless of generous feedings incited by baby's smiles or cries. Young puppies are constantly seeking out the mother to suckle, but the female dog only permits them to eat when instinct allows, otherwise they must exercise firm control throughout the infancy and youth of her children, else they will easily develop the glutton habit.

Baby should be permitted to empty both breasts at each feeding. It should require only ten minutes to accomplish this. Complete emptying ensures full meals at each feeding. If the mother's milk is unfit for her baby, the next best food adapted to the young digestion is goat's milk taken from a group of healthy animals. Three-, four-, or five-ounce feedings for the baby will be enough. At the sixth month, the quantity may be gradually increased six to eight ounces by the ninth month. When goat's milk is not to be had, clean cow's milk may be used. Milk should be diluted with equal parts of distilled water until the sixth month. Thereafter, one part water to two parts milk.

The controversy over raw or pasteurized milk goes on and on between the phantoms of the laboratory and the naturalists, but the facts remain the same. Recently a test was conducted in New York on a group of babies. One group was subjected to pasteurized human milk and the other to raw cow's milk. The ones given the raw cow's milk were superior in growth and I.Q.s to those who were given pasteurized human milk. Had the human milk been raw and from healthy mothers the result would have been the

reverse.

Pasteurization is a process which submits the milk to a temperature of from 130° Fahrenheit to 160° Fahrenheit for a period of from ten to thirty minutes reputedly to destroy all harmful organisms. In destroying the organisms, it also destroys the vitamins and nutritive qualities of the milk.

After the first few months other fresh fruit juices such as grapes, figs, berries, etc., may be given in the same amounts as the orange and grapefruit juices.

Milk or fruit juices should be prepared immediately previous to feeding and not for the whole day's schedule. Food quickly loses nutritional value when prepared in advance. Room temperature is best for all foods given to the baby. Fruits should be left out of the refrigerator for a time previous to the feeding. Milk in the bottle should be immersed in a utensil filled with warm water to remove the chill, not poured into a pan and heated over a flame.

Nipples and bottles should be well cleaned after use but the superstition-inspired measures of sterilization are unneccessary.

So often repeated that mentioning should be unnecessary, we wish to stress the importance of not feeding the baby at night and of not awakening it at any time for a feeding. This will cause restlessness, rob the baby of sleep, and promote gluttony.

How adults love to watch baby's reaction when they offer it a foreign food! The digestions of most children suffer one outrage after another as fond papa, uncles, aunt and friends offer the helpless little life anything from drumsticks to pickles, cigarettes to coffee, and beer to salted peanuts. No doubt it is "cute" to watch the little one's face distort into amusing expressions but in addition to being "cute" it is also stupid, poisonous, and criminal,. Infant's arid children do not crave or desire these things. Adults seem to believe that the little innocents are born with the depraved habits which are theirs. Their bodies are still clean, pure, and undefiled. They are potentially strong, vigorous, and noble. Why offer them candies and ice cream? Why give them spoonful of the food from your own plate? Why coax them into eating rubbish that will destroy the beautiful handiwork of nature? If a man purchased a thoroughbred dog, horse, or livestock he would be most cautious about every ounce of food given to the animal and would sue the man that fed him otherwise. He would no more think of offering the creature beer to drink or spaghetti to eat than he would to feed him a dose of poison. Yet his own child, which should be far more precious to him, he treats as badly as a little boy does a grasshopper or fly as he plucks out wings and pushes needles through the squirming body.

Infants should not be fed if they do not take the feedings willingly and eagerly, they are sated or indisposed and the meal should be omitted. If a fever is evident, nothing but water should be given for a day or two. Every time a baby cries it is not hungry. Look for other causes.

Infant feeding is simple and must be kept so, otherwise the usual diseases of children will be developed. Forget the cereals, the drugstore pictures of fat, adenoidal babies, the strained vegetables, and feed the newborn babe the natural, wholesome, effortless, simple way which nature outlined far back in the dim recesses of time. It is a famous and proven recipe!

Article #2: Indigestion in Babies by Dr. Herbert M. Shelton

I receive frequent letters from anxious mothers asking what causes indigestion in their infants (under two years) and what they can do about it. Indigestion in children under two seems to be very common.

Let us try to answer the first question: what causes it? Nerve energy is functioning power and anything that lowers nerve energy and brings on enervation will cause indigestion. Excessive play, overexcitement, overindulgence, overeating, eating between meals, eating when tired, or when excited, starch eating before the end of the second year, being tired from outings, neglect of the afternoon nap, being overheated, or chilled, drugging and anything that will use up nerve energy excessively may result from too much juice being fed the baby. Some mothers seem to want to drown their babies in juice.

The first symptoms of indigestion are "nervousness," irritability, bad breath, bloated bowels, coated tongue, cold feet, constipation, colic, hives, sleeplessness, grinding of the teeth in sleep, drooling. Babies are always irritable and cry easily when they have indigestion. There will be undigested curds in the stools and often foul stools.

Teething does not cause indigestion, but indigestion may result in difficulties in teething. There can be no doubt that teething, which is normally a painless and unnoticed process, can be very painful in sickly babies. The gums may become inflamed and painful, the baby will cry and fret and its digestion will be upset still more, but the basic cause of the indigestion, which is the forerunner of painful teething is enervation.

What can be done about indigestion? Remove the cause. How? Stop the overfeeding. Cease overexciting the baby. Discontinue feeding it between meals and at night. Cease feeding starch and other foods which it is not physiologically equipped to handle. Give it less juice. Stop over-bathing it. Dress it more warmly or less warmly, as required. Do not permit it to overplay. Give due attention to its afternoon sleep. Give up the drugging.

Mothers want to know what they should do immediately, when the baby has indigestion. The care required is simple. Put the baby to bed with something warm at its feet. Let it rest and keep quiet until it is normal. Often within twenty-four hours the baby will be able to eat. If baby wakes up smiling, in good humor and with a sweet breath, it is ready to be fed. But, if it wakes up crying and irritable, with pungent breath and white lines (lines of stomach irritation) around the mouth and nose, complaining of discomfort, the fast should be prolonged for another twenty-four hours. Indeed this program should be continued until the baby is normal, even if it takes several days. Mothers are usually in a hurry to feed and by feeding prematurely, they prolong the indigestion. Give the body an opportunity to get rid of the surplus food, toxemia, and to restore functioning power.

When baby is ready to resume feeding, the food should be a little fruit juice—orange juice, fresh tomato juice, or other fresh fruit juice in season (I have used watermelon juice, canteloupe juice, papaya juice, peach juice, apricot juice, plum juice, pear juice, apple juice, etc.) which may be given every three hours. If the baby goes through this first day of feeding comfortably and rests well through the night, the next day regular feeding may be resumed, giving but about one-third what had been previously given. In one or two days, if the baby continues to do well, the amount may be increased to half the amount the baby had been in the habit of eating. After another day or two a full diet may be resumed. By a full diet, I do not mean the diet conventionally fed to babies, nor do I mean a return to the prior overfeeding and feeding between meals.

Until the baby is two years old it needs and should have no other food but milk and fruit juices. The best food in the world for the baby is its own mother's milk. There is no adequate substitute for mother's milk. Baby is physiologically unequipped to chew and digest starches before the age of two years and starch foods should not be given before that age. Indeed, baby is not equipped to chew solid foods until it has a mouth full of teeth and, normally, a full set of deciduous teeth is developed at 24 months.

Mothers and others who care for children, whether under or over two years of age, should be able to recognize the symptoms that precede, accompany, and follow indigestion, constipation, gas, distention of the bowels, excessive urination, a gradual growing state of dissatisfaction, white curds in the stools of milk-feeding babies, hard stools, etc. It should be known that white curds in the stools indicate that the baby is getting more milk than it can digest. It is being overfed. Mothers should not wait until the child is pronouncedly sick before doing something about this. Cut down the milk one-half and continue this

feeding program until the bowels are moving regularly and the stools show a normal consistency.

When the baby is obviously taking in adequate amounts of milk and there are still curds in the stools, it means indigestion. The indigestion must be remedied before more milk is given. Unfortunately, our love of feeding and fondness for "butter balls" causes us to want to overstuff babies at all times. If a baby is not gaining weight or if it is losing weight, we tend to become frantic and fly to extremes.

During the hot months, constipation often fluctuates with diarrhea. The diarrhea is the means of expelling the accumulation in the bowels. Some children will have both vomiting and diarrhea. The care in these cases should be the same as that previously described. Put the baby to bed, stop all food, and keep him/her warm. No food is to be given until all indications of diarrhea are gone. If there is pain in the abdomen, hot application to the abdomen may be used for relief.

I do not advise water for infants during the first year of life. So long as their diet is all fluid—milk and fruit juices—there can be little or no need for water. But, when the child is going without food, all the water it desires may be given.

Article #3: The Long Nursing Period by Dr. Herbert M. Shelton

Recently a woman called the Health School from a distant city to make arrangements to come here for a fast. She stated that she was nursing her four-year-old son. Although, historically, the long nursing period has dominated human infant feeding until very recent times, such a long nursing period is at present considered an oddity. Under the able tutelage of physicians, pediatricians, the dairy industry and the manufacturers of canned baby foods, mothers of today tend to regard nursing their infants as an activity that belongs to lower stages of culture. They do not think of actively nursing their babies as a biological function, but as a mere cultural activity.

In the Renaissance, French upper-class women refused to breast-feed their babies. Not having cows as substitutes for mothers, they secured wet nurses, commonly young farm women, to nurse their offspring. This is not the first historical instance in which women have found it beneath their dignity to nurse their babies A leading Chicago pediatrician recently stated in a radio interview that in some parts of Africa, in which the people have been recently introduced to civilization, malnutrition in infants and children is on the increase due to a change in the infant-feeding pattern. As these countries become more civilized, he stated, mothers identify themselves with their more affluent counterparts and are turning away from breastfeeding.

Contrast this attitude and practice with that of the ancient Egyptians, among whom it was the custom to nurse their babies three or more years. Among these ancient peoples, declared by some students of the subject to have been the healthiest people that history records, even the goddesses nursed their young, as revealed by the fact that Isis nursed the baby Horus. Statues of the infant Horus drinking her milk and gazing up admiringly into her eyes may be the original Madonna and Child. Among a people whose goddesses do not find it beneath their dignity to nurse their offspring, those mothers who refused to do so must have been quite rare.

In *The Hygienic Care of Children*, I stressed the principle that the nursing period bears a definite relation to the time required for the young mammal to attain maturity. Animals that grow rapidly and mature early, as a rule, have short nursing periods; animals that grow slowly and mature later, as a rule, have longer nursing periods. There are exceptions to this rule, found largely among carnivorous animals. It is

a significant fact that the young of carnivorous animals are more poorly developed at birth than the young of vegetarian animals, are likely to be born blind, and pass through a period of helplessness.

The female walrus suckles her young for two years, or until their tusks are long enough to dig for clams. This is an example of how young mammals are nursed until their anatomical equipment is sufficiently developed to enable them to eat other foods. Baby gar seals are weaned during the third week after birth, as the cows again take to the sea. They must now feed themselves. For the next two weeks they do not eat, but rely upon their accumulated food stores. Becoming hungry, they take to the sea and learn to find food.

The elephant matures at 14 years, but is ready for mating at 11 or 12 years. The usual range of life of the elephant is about 50 to 60 years. The young elephant sheds its milk tusks five or six months after birth, but continues to suckle for another two years. The young stay with the mother three to four years, perhaps sucking most of this time. Indeed, up to the age of five, the trunk is of little use to the young elephant; but at this age the youngster begins to gather grass and ceases to depend upon its mother's milk.

Man grows slowest and is longest in maturing of all the animals. We should naturally expect to see the normal human nursing period to be a rather lengthy one. And, indeed, it has been lengthy throughout recorded history until within the lifetime of many now living. Sixty years ago it was not unusual for mothers to nurse their babies for two, three, and four years.

An old book, *A Description of Pitcairn's Island and Its Inhabitants*, tells us that the women of Otaheite sometimes do not wean their babies for three to four years. The Dyak women, chopping wood and tending fires, while their husbands are out hunting, are still perfectly capable of nursing their offspring, whom they suckle until they are two to three years old. Aztec children were weaned in the third year.

The Spanish explorer, Cabeza de Vaca, who spent a few years among the now extinct Karankawa Indians who inhabited the coast, offshore islands and a narrow strip of mainland South Texas, from the west side of Galveston to Corpus Christi, tells us that they nursed their children until they were 12 years old, because, as they explained, it was frequently necessary to go without food for several days and the children had to be suckled for a long time. These food gatherers, living in a land where food was not abundant and wandering from campsite to campsite as the food supplies of one region were exhausted, seem to have often been short of food.

This may be accepted as an example of the manner in which the nursing practices of mankind have been determined by the exigencies of life. Where food has been plentiful and its character such that very young children could eat it, the children have been nursed for shorter periods; where food was scarce, often lacking entirely, and coarse, hence unsuited to the very young, the nursing period has been prolonged. Fortunately for these children, primitive women have been able to provide milk for their young. They have not called upon milk animals to substitute for them.

It may be reasoned that because in modern life food is abundant, of great variety, and our means of preparing it far beyond anything the primitive mother ever dreamed of, we are justified in reducing the nursing time of our infants to a bare minimum or in omitting nursing altogether. But inasmuch as no substitute for mother's milk has been found that equals it in meeting the needs of the human young, it seems that there is an irreducible minimum of time during which all babies should be nursed. Nursing is not only a nutritional must, it also possesses psychological value for which no adequate substitute has been found.

The foregoing fact was early recognized by Hygienists. Dr. Thomas Low Nichols gave expression to it when he said: "The best food for an infant is the milk of a healthy mother. The mother's love strengthens her babe, and their lives mingle in the act of nursing. A mother gives much more nourishment than her milk. She gives of her nervous power, her vital force, her heart and mind and soul." That there is any transfer of nerve energy or of vital force from mother to baby is extremely doubtful, but that the mother gives of her heart, mind, and soul, in that she gives the baby her love, comfort, a feeling of security and

a feeling of belonging is now coming to be recognized by orthodox psychology.

During uncounted ages, antedating nursing bottles and nipples, the first sustenance the newborn baby received came from its mother's breasts. This is still the best source of nutriment for the human infant. There is another and, I think, fundamental question I should ask in this connection, namely: what are the results of breaking the normal sequences that have been established in nature? Pregnancy and birth are normally followed by a prolonged nursing period. When a woman fails to nurse her offspring, this normal sequence is interrupted. There must inevitably be unwanted consequences of this break into the normal order. A study of such consequences, if it were possible under present circumstances, might reveal some connection between woman's failure to nurse her babies and the increasing prevalence of breast cancer. It might also reveal a connection between this break in normal order and woman's nervous troubles.

Many women complain that they are unable to nurse their children. In most cases, it seems to me, this is merely a camouflage for her refusal to do so. I believe that most women can nurse their babies for prolonged periods if they really desire to do so. Life is hard in *primitive* societies and food is often scarce, but these mothers succeed in nursing their babies and children for a few years. Life has always been hard among the masses of mankind, yet peasant women, doing hard work in the fields, have throughout history nursed their babies for two, three, and four years. In many instances they have nursed their own baby and that of another woman.

When a woman's own mammary glands refuse to secrete food for her offspring, it is high time we stop and ask a few serious questions. Why are women so defective that they cannot secrete the essential food of their young? What has happened to them that the race could not survive except for the assistance of the cow or goat? If tomorrow all the milk cows of the land were killed or were to cease producing milk, hundreds of thousands of babies would suffer for lack of food. Many of them, no doubt, would perish. This is a precarious position for any species of animal life to find itself in. Is it possible to restore the human breast to full functioning power? If not, must the human race be forever be the unweaned parasite of the cow?